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REMARKS

This Amendment is being filed in response to the Office Action mailed August 23, 2006, which has been reviewed and carefully considered. Reconsideration and allowance of the present application in view of the amendments made above and the remarks to follow are respectfully requested.

By means of the present amendment, independent claim 25 has been amended for better conformance to U.S. practice, namely beginning the independent claim 25 with 'The'. Claim 25 was not amended in order to address issues of patentability and Applicant respectfully reserves all rights under the Doctrine of Equivalents.

In the Final Office Action, the Examiner objected to the drawings because the handwritten characters of the replacement sheets are not legible. It is believed that this rejection is an oversight as it had already been addressed in the Amendment filed on July 3, 2006, in response to the Final Office Action mailed May 5, 2006, where 4 sheets of Replacement Drawings had been submitted. The undersigned checked Public Pair and it appears that these 4 sheets of Replacement Drawings are of record and include clear

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handwritten characters. If this objection to the drawings is maintained, then Applicant respectfully requests with exact specificity which handwritten characters of which elements/boxes of which figures are not legible.

The drawings are further objected to for failing to show N codewords having a zero running digital sum (RDS), as described in the specification. Applicant respectfully points out that this feature is shown in the drawings where, e.g., for the N=2, FIG 4 shows a graph that crosses the x-axis, i.e., has a value of zero for every N=2 code words, as described on page 9, lines 27-30, for example. Further, in FIG 3, the last two boxes to the right of box 34b (of the pre-coded word 31) include 4 bits as follows: 0111 and 0001, where there digital sum is zero. In fact, the Examiner has admitted on the last line of page 3 of the Office Action that FIG 4 does indeed show the noted feature. Accordingly, Applicant respectfully requests withdrawal of the drawings objection and approval of the proposed drawing sheets which were enclosed with the Amendment filed on July 3, 2006, in response to the Final Office Action mailed May 5, 2006.

In the Office Action, claims 1-25 are rejected under 35 U.S.C.

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§112, first paragraph, since allegedly the following feature of claim 1 "...a running digital sum of each group of N adjacent codewords whose running [sum] equals zero" is not adequately described in the specification, and how the coded data is combined to form a running digital sum (RDS) zero. In particular, on the last two lines, page 3, to page 4, line 2 of the Office Action, it is alleged that:

As for figure 4, adjacent codewords 42 and 42a may generate a zero disparity based on the graph, however, adjacent codewords 42a and 43 will not yield a zero disparity. Hence, the limitation that N adjacent codewords yield zero disparity is misleading.

Applicant agrees that adjacent code words 42a, 43 in FIG 4 may not yield a zero RDS. However, it is respectfully submitted that this in no way contradicts any features of claims 1-25.

Independent claims 1, 10, 19 and 24-25 do not require that a combined running digital sum of adjacent code words equals zero.

Rather, independent claims 1, 10 and 19 specifically require:

a combined running digital $\frac{\text{sum of each group of N}}{\text{adjacent code words}}$ equals zero. (Illustrative emphasis provided)

It is respectfully submitted that this feature is clearly described in the specification and shown in the figures. Further,

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independent claims 1, 10 and 19 have been amended for better clarity. Independent claim 1, now recites (with a similar recitations in independent claims 10 and 19):

coding the stream of precoded input words into a stream of groups of N code words such that a combined running digital sum of each group of N adjacent code words equals zero.

It is respectfully submitted that independent claims 1, 10 and 19 were merely amended herein to expedite consideration and allowance of the subject matter contained therein and not in order to address issues of patentability. Accordingly, Applicant respectfully reserves all rights under the Doctrine of Equivalents.

It is further respectfully submitted that the specification and drawings provide ample support and sufficient description, as well as fully enable claims 1-25, in such a way as to reasonably convey to one skilled in the relevant art how to make and/or use the present invention without any undue experimentation.

In particular, page 9, lines 22-30 and FIG 4 show the illustrative example where N=2, i.e., where 2 adjacent code words form a group, where three groups 42-42a; 43-43a; and 44-44a are shown in FIG 4. As clearly shown in FIG 4, the combined running digital sum of each group 42-42a, 43-43a, and 44-44a, (where each

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group is formed by N=2 adjacent code words e.g., adjacent code words 42-42a; 43-43a; or 44-44a) equals zero.

Clearly, the specification including the figures comply with the written description and enablement requirement, and reasonably convey that the inventor, at the time of the application was filed had possession of the claimed invention, as well as reasonably convey to one skilled in the relevant art how to make and/or use the present invention without any undue experimentation. One skilled in the art would have no trouble making and/or using the present invention without any undue experimentation in view of the present specification and drawings. Accordingly, withdrawal of this rejection under 35 U.S.C. §112, first paragraph is respectfully requested, and allowance of claims 1-25 is respectfully requested.

In the Office Action, claims 1-25 are rejected under 35 U.S.C. \$112, second paragraph as allegedly indefinite due to certain features in claims 1, 7-8, 16-17 and 22-25. It is respectfully submitted that claim 1 is not indefinite since the allegation on page 4, line 9, that "[f]or the coded data does not have an RDS (running digital sum) of "0"", is not required by claim 1. Rather,

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claim 1 requires "a combined running digital <u>sum</u> of each <u>group</u> of N adjacent code words equals zero," which is definite and fully supported in the specification and figures as detailed above.

Regarding claims 7-8, 16-17 and 22, it is alleged on page 4, lines 10-11, that "the tables of Figures 5 and 6 and claims 7,8,16,17,22 are misleading because their RDS are not equal to zero." Applicant agrees that "their RDS are not equal to zero" and respectfully submit that claims 7-8, 16-17 and 22 do not recite any such features. Rather, claim 7 specifically recites that (with similar recitations in claims 8, 16-17 and 22) "the stream of input words is precoded using the following table." (Illustrative emphasis added) It is respectfully submitted that there are no recitations in the claims requiring the RDS of the precoded input words be zero; rather, the precoded words are coded "into a stream of groups of N code words such that a combined running digital sum of each group of N adjacent code words equals zero," as specifically recited in independent claims 1, and similarly recited in independent claims 10 and 19.

Further, the rejection of claims 23-25 under 35 U.S.C. §112, second paragraph is respectfully traversed. However, in the

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interest of advancing prosecution, claims 23-25 have been amended for better clarity.

It is respectfully submitted that claims 23-25 have been merely amended merely to expedite consideration and allowance of the subject matter contained therein and not in order to address issues of patentability. Accordingly, Applicant respectfully reserves all rights under the Doctrine of Equivalents. It is respectfully submitted that the rejection of claims 23-25 have been overcome and an indication as such is respectfully requested.

Based on the foregoing, withdrawal of the rejection under 35 U.S.C. §112, second paragraph, of claims 1-25 is respectfully requested.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

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It is believed that no additional fees or charges are currently due beyond the fee for the Request for Continued Examination (RCE) to be charged to the credit card as noted by the enclosed authorization. However, in the event that any additional fees or charges are required for entrance of the accompanying amendment, they may be charged to applicants' representatives Deposit Account No. 50-3649. In addition, please credit any overpayments related to any fees paid in connection with the accompanying amendment to Deposit Account No. 50-3649.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

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November 20, 2006

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